

# Datasheet

Motor Starter 12A - 1166250-00000




The data sheet describes the technical features of the motor starter which has the following functional characteristics:

**Features:**

- current monitoring: NO
- Reversing switch: NO
- EXECUTION: PROTECTOR
- Switching characteristics: On / Off
- communications system: AS-i

The function must be addressed and/or parameterized in advance for integration into the machine and system environment. The settings required for this must be made directly via the components used. The steps required for this can be found in the function-specific document "Operating instructions".

01.04.2021-ROS	Service approval	4.0		UL- Identification	Order no.	
14.02.2021-RSP	Service approval	3.0			1166250-00000	
25.03.2020-LH	Approval service	2.0		Designation	<b>Datasheet</b>	
21.11.2019-KUZ	Initial creation	1.0		Motor Starter 12A	Created	Page
Change No.	Description of changes	Index			01.04.2021-ROS	1


The information contained in this data sheet was compiled with the greatest possible care. For correctness, completeness and topicality the liability is limited to gross negligence. All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH  
 Carl-Benz-Str. 6 D-74354 Besigheim  
 Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

# 1 General component properties

## 1.1 Electrical properties

DESIGNATION	VALUE	UNIT
Line protection back-up fuse	16	A
Input voltage Rated value	400 / 480	V AC
Input current Rated value	12	A
Rated frequency	50 / 60 (+/- 10%)	Hz
Surge voltage Rated value	2,5	kV
control voltage	24 (-20% ... +10%)	V DC
Auxiliary current	300	mA
load voltage	600 maximum	V AC
load current	9 - 12 adjustable	A
usage category	12A at AC-3	
dissipation	15	W
Switching frequency with AC-3	750	1/h
current monitoring	NO	
EXECUTION	PROTECTOR	
Switching characteristics	On / Off	
Tripping class according to IEC 60947	Class 10	
Electromagnetic compatibility	in accordance with EN 61000-4-2/3/4/5/6/8/11/29/39, EN 55011 Radiated, EN 55011 Conducted	
communications system	AS-i	
AS-i voltage	26,5 - 31,6	V DC
AS-i specification	3.0	

01.04.2021-ROS	Service approval	4.0		UL- Identification	Order no.	
14.02.2021-RSP	Service approval	3.0			1166250-00000	
25.03.2020-LH	Approval service	2.0		Designation	<b>Datasheet</b>	
21.11.2019-KUZ	Initial creation	1.0		<b>Motor Starter 12A</b>	Created	Page
Change No.	Description of changes	Index			01.04.2021-ROS	2

The information contained in this data sheet was compiled with the greatest possible care.  
For correctness, completeness and topicality the liability is limited to gross negligence.  
All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH  
Carl-Benz-Str. 6 D-74354 Besigheim  
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

## 1.2 Mechanical properties

DESIGNATION	VALUE	UNIT
Interface Input	1x X-TEC15 + 1x M12 A-coded	
Interface Output	1x X-TEC 15	
Reversing switch	NO	
Installation altitude above normal zero	2000	m
TYPE OF PROTECTION	IP54	
Mechanical life	100.000 switching cycles	
Shock resistance according to EN 60068-2-27	15g/11ms, 6g/11ms (electrical)	
Vibration according to EN 60068-2-6	10-500Hz, 0,35mm, 5g	
Vibration according to EN 60068-2-64	5-500Hz, 0,75g RMS	
Impact resistance Housing	IK08 as per DIN EN 5012/VDE 0470 Part 100	

## 1.3 Thermal properties


DESIGNATION	VALUE	UNIT
Ambient temperature (operation)	-20 to +45	°C
Ambient temperature (storage)	-25 to +80	°C

## 1.4 Chemical properties

DESIGNATION	VALUE	UNIT
Housing material	Polycarbonate, glass fibre reinforced	
Burning behaviour Housing	5VA in accordance with UL 50 / UL 746C, V-2 in accordance with UL 94, 960°C in accordance with VDE 0471 / EN 60695	
Max. relative humidity	95% in case of 25°C and 50% in case of 40°C	
stability	UV/weather/weak acid/alcohol/mineral oil/ammonia gaseous/greases	

## 1.5 Approval

DESIGNATION	VALUE	UNIT
SCCR (Standard-Fault) policies	5kA RoHS Directives, REACH Regulation	

01.04.2021-ROS	Service approval	4.0		UL- Identification	Order no.	
14.02.2021-RSP	Service approval	3.0			1166250-00000	
25.03.2020-LH	Approval service	2.0		Designation	<b>Datasheet</b>	
21.11.2019-KUZ	Initial creation	1.0		Motor Starter 12A	Created	Page
Change No.	Description of changes	Index			01.04.2021-ROS	3

The information contained in this data sheet was compiled with the greatest possible care.  
For correctness, completeness and topicality the liability is limited to gross negligence.  
All rights reserved to DIN 34

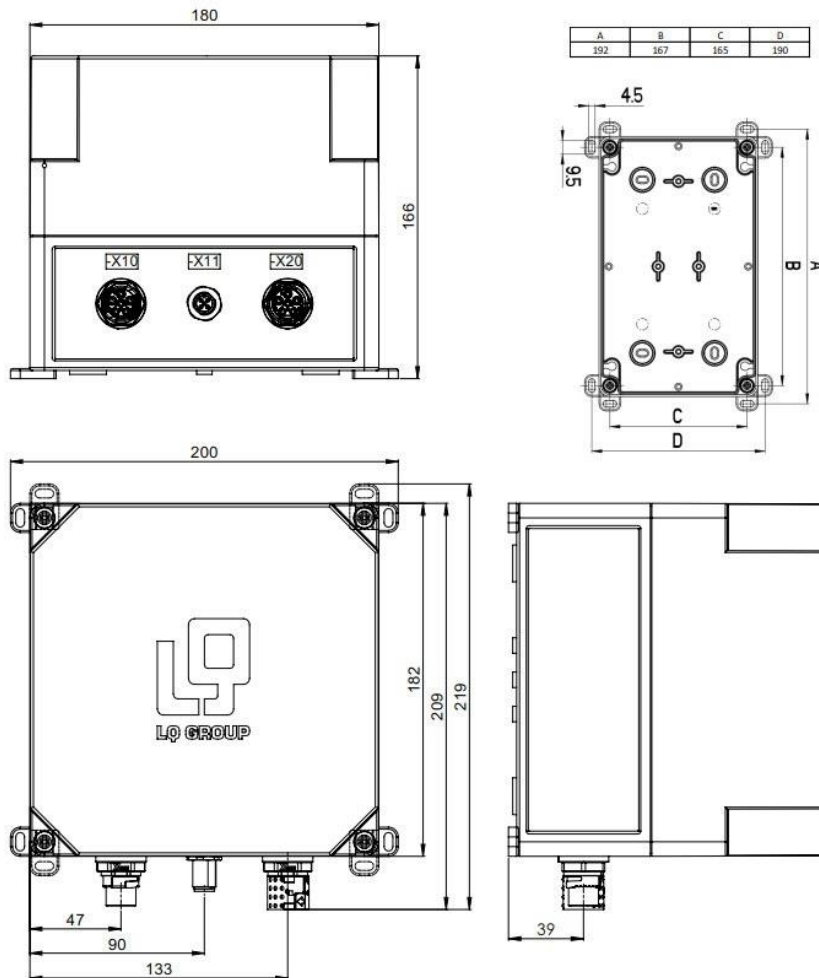
LQ Mechatronik-Systeme GmbH  
Carl-Benz-Str. 6 D-74354 Besigheim  
Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com


## 2 Assembly

### 2.1 Housing dimensions

DESIGNATION	VALUE	UNIT
Size of construction (Width x Height x Depth)	200 x 219 x 166	mm
Distance to be maintained below	170	mm
Distance to be maintained laterally	30	mm
installation type	screw fastening	
installation position	vertical installation	

### 2.2 Dimensional drawing



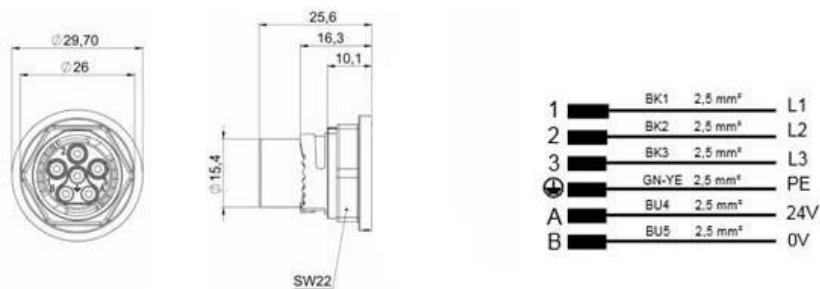
01.04.2021-ROS	Service approval	4.0		UL- Identification	Order no.	
14.02.2021-RSP	Service approval	3.0			1166250-00000	
25.03.2020-LH	Approval service	2.0			<b>Datasheet</b>	
21.11.2019-KUZ	Initial creation	1.0			Created	Page
Change No.	Description of changes	Index		Motor Starter 12A	01.04.2021-ROS	4

The information contained in this data sheet was compiled with the greatest possible care. For correctness, completeness and topicality the liability is limited to gross negligence. All rights reserved to DIN 34

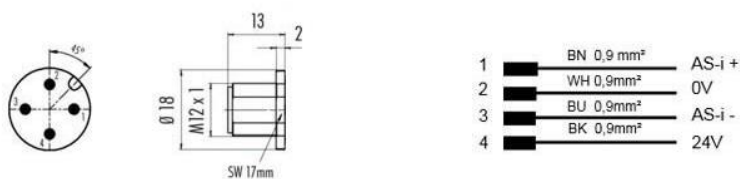
LQ Mechatronik-Systeme GmbH  
 Carl-Benz-Str. 6 D-74354 Besigheim  
 Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com

### 3 Interface description

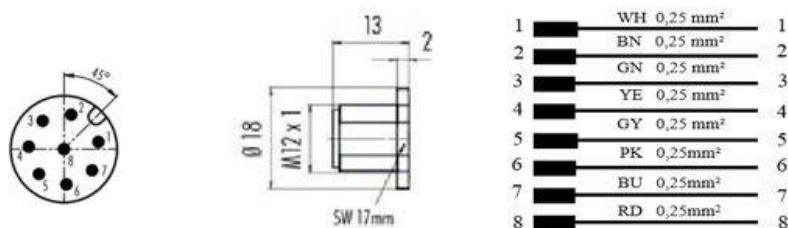
#### 3.1 -X10 X-TEC15 male - Input 400V AC / 24V DC



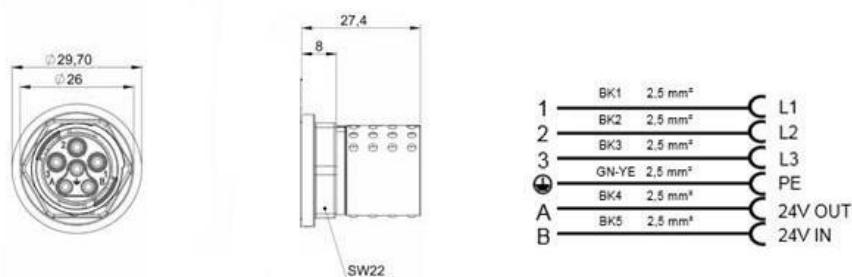
#### 3.2 -X11 M12 A- Coded - Communication AS-i




#### 3.3 -X11 M12 A- Coded - Communication Parallel



#### 3.4 -X20 X-TEC15 female - Output 400V AC



Pin A/B in interface -X20 is used for thermal monitoring of the motor temperature via a bimetal.

01.04.2021-ROS	Service approval	4.0		UL- Identification	Order no.		
14.02.2021-RSP	Service approval	3.0			1166250-00000		
25.03.2020-LH	Approval service	2.0			Designation	<b>Datasheet</b>	
21.11.2019-KUZ	Initial creation	1.0			Motor Starter 12A	Created	Page
Change No.	Description of changes	Index				01.04.2021-ROS	5

The information contained in this data sheet was compiled with the greatest possible care. For correctness, completeness and topicality the liability is limited to gross negligence. All rights reserved to DIN 34

LQ Mechatronik-Systeme GmbH  
 Carl-Benz-Str. 6 D-74354 Besigheim  
 Tel. +49 (0) 71 43 / 968-0 - info@de.lq-group.com